# CUSTOM FABRICATION AND WELDING SERVICES



# WHY CHOOSE SWANTON WELDING FOR YOUR CUSTOM FABRICATION NEEDS?

Swanton Welding and Machining is committed to assisting you to meet all of your project requirements. With 65 years' experience, state of the art equipment, skilled work force, and plenty of shop capabilities we will supply you with a quality project done right.

We are dedicated to continual process improvement. With an in-house CWI, our welders are certified to meet the highest quality standards. Swanton Welding & Machining is always striving to offer you the best fabrication experience possible. We invite you to contact Swanton Welding and Machining to see how we may assist you.



# **CUSTOM FABRICATION & WELDING CAPABILITIES**

#### **ENGINEERING DESIGN**

- From concept to completion
- Industrial fabrication
- Mechanical design
- AutoCAD 2015
- LT Packages
- Inventor
- Material handling
- Prototype design
- Complex fabrication & assembly

#### WELDING CAPABILITIES

- AWS D1.1 certified welders
- Steel, stainless steel, aluminum, copper, and bronze
- Hardfacing
- Tool and die
- Flux-cored Arc Welding (FCAW)
- Gas Tungsten Arc Welding (GTAW)
- Stick Electrode Gas Metal Arc Welding (GMAW)
- Shielded Metal Arc Welding (SMAW)
- 50 welding machines
- In-house CWI

#### FORMING

- 2 12' 350-ton capacity press brake
- 1 10' high precision CNC press brake
- 1 4' ROUNDO precision roll
- 1 Parmagiani 4-roll machine
- 1 Davi multiple shape roller (angle, etc.)
- 1.5" x 10" roll for heavy plate
- Pipe bender

### **ADDITIONAL SERVICES**

- 225,000 sq. ft. manufacturing space
- Painting booth (75' x 32' x 28')
- Laser and water cutting
- In-house machining
- Sandblasting
- Ficep Structural Beam Line









# HEAVY FABRICATION SERVICES



# WHY CHOOSE SWANTON WELDING FOR YOUR HEAVY FABRICATION NEEDS?

Swanton Welding Heavy Fab offers some of the largest custom and structural fabrications in the Midwest. We have a proven track record of supplying large and complex fabrications such as clean air, furnaces, large duct work, bulk storage, material handling, structural steel, tanks, hoppers, and chutes for industries that include utilities, mining, oil & gas, industrial, alternative energy and solar.



# **HEAVY FABRICATION CAPABILITIES**

## **GENERAL CAPABILITIES**

- Custom
- Large Industrial Fabrications
- Complex Systems
- Heavy
- Structural
- Industrial
- 80 Ton Crane Lifting
- 285,000 sq. ft. Manufacturing Space
- Total Man Power Exceeds 100

#### FABRICATION METHOD CNC Machining

- Assembly
- Bending
- Machining
- Cutting
- Forming

## PRODUCTS

- Assemblies
- Enclosures
- Stacks, Flares
- Heavy Plate
- Panels
- Plates
- Fab to Print
- Ductwork
- Hoppers
- HEAVY FABRICATION PRODUCTS
- Large Ductwork
  Dredges and Barges
- Furnaces
- Tanks
- Hoppers
- Bulk Storage
- Clean Air
- Bins

## **INDUSTRY STANDARDS**

 In-house CWI AWS D1.1 Certified

- STRUCTURAL FABRICATION Leg Supports
- Building Steel
- Platforms
- Hand Rails
- Stairs
- Pipe Supports
- Ornamental Towers
- Industrial

## **MATERIALS & SIZES**

- Carbon Steel
- Stainless Steel
- Aluminum
- Other Misc.

## **INDUSTRY FOCUS**

- Environmental
- Structural
- Process Paper
- Steel Mills
- Coal
- Foundry
- Clean Air
- Petro
- Spare Parts

## ADDITIONAL SERVICES

- Assembly
- Finishing
- Sandblasting

## **FILE FORMATS**

- AutoCAD
- 2D Mechanical
- CNC Beam Line
- Painting
- Prefinishing
- 3D Inventor

• Thickness: Thin gauge to 12 in.

Caged/Non-Caged Ladders

• Max. Length: 250 ft.

Overhead Conveyors

Safety Fabrication

Trusses

Pipe Spools

- Max. Width : 100 ft.
- Max. Height : 100 ft.
- Tolerance: Per Print Max. Weight : 100 tons
  - Chemical Process
  - General Industrial
  - Alternative energy
  - Power and utilities
  - Bulk Handling and Storage
  - OEM
  - General Contractors
  - Industrial Components

- Build to Print
- Bulk Conveying
- Flares and Stacks
- Steel Mill and Foundry
- Alternative Energies

- Tubing • AWS D1.1
- Heavy Beam and Plate Large Diameters

Component Parts

- Assemblies
- CNC Beam line

• Welding

• Bins

Tooling

Pressed

Rolling

Sawing

# STRUCTURAL STEEL CAPABILITIES



# WHY CHOOSE SWANTON WELDING FOR YOUR STRUCTURAL STEEL NEEDS?

Since 1956, Swanton Welding has been providing our customers with the highest quality services for their metal fabrication needs. Swanton Welding's experienced team of fabricators, welders, painters, and technicians has enabled Swanton Welding to be the comprehensive metal fabrication team your project needs.

Our structural steel fabrication team often deals with the construction of large heavy steel beams that require precision drilling or cutting to make sure all parts are assembled correctly.

Swanton Welding's streamlined approach to structural steel projects focuses on quality, affordability, and delivery. With a focus on quality and attention to detail, Swanton Welding's team will meet your specifications, giving you a final product you will be able to depend on for a very long time.

Previous structural steel projects include stairs, ladders, handrail, platforms, stair towers, Catwalks, in addition to our construction-based steel services for buildings and machines.

Swanton Welding offers diverse services which allow for unique custom fabrication and finishing services along with our structural steel projects. Contact Swanton Welding today to learn how a Swanton Welding partnership can benefit your next structural steel project.



# **STRUCTURAL STEEL CAPABILITIES**

#### EQUIPMENT

#### 40' Ficep Beam Line

- Fully automated
- Uses CNC control for accurate sawing to length and hole drilling in beams, channels, angles and flat bar

#### 5 CO<sup>2</sup> laser cutting machines

- (Gaseous) 4,000 watt power supply, 80"x160" table

#### Davi Angle roller

- Rolls angle, channel, and various structural steel shapes

#### Ficep Angle line (соміна soon)

- Cut, punch, drill up to 6" x 6" angle. High-speed for many applications, including cross bracing, angle clips, transmission towers, material handling conveyors, structural supports, and much more.

#### **CUTTING MATERIAL (METAL)**

Aluminum Stainless Steel Steel Thin Metal Ferrous Metals Heavy Plate Non-Ferrous Metals

#### **FILE FORMATS**

AutoCAD 2D Mechanical 3D Inventor









# METAL ROLLING & FORMING SERVICES



PARMIGIANI

## WHY CHOOSE SWANTON WELDING FOR YOUR METAL ROLLING AND FORMING NEEDS?

Swanton Welding & Machining's rolling and forming equipment performs precision rolling and forming operations that can generate multiple bends in plate, sheet metal, pipe and structural, all while maintaining required tolerances and consistent repeatability.

We work with mild steel, stainless, sheet metal and aluminum, creating such products as enclosures, formed channels, hoppers, cones, arcs, rolled tanks, chutes, curved handrails, amusement rides, roof trusses, canopies and many other items involving rolling and multiple bends.



# **OUR ROLLING CAPABILITIES JUST GOT BETTER**

Swanton Welding & Machining Co. is dedicated to finding the newest and most innovative ways to serve our customers. This year we purchased a new 4 roll Davi angle roll. With this new piece of equipment, we can roll angle, beams, channel, tubing, pipe, tees, flats, and both square and rectangular tubing.

This new addition has catapulted Swanton Welding to become a



complete rolling facility when coupled with our already robust rolling capabilities and skilled team.



Our Parmagiani 4-roll machine can roll a 1"x 10' (Thicker if less width).

MG Double Pinch Hydraulic 4-Roll Plate Bending Machine can roll ¼" x 5'.

We also have two more to roll from gauge to  $\frac{1}{4}$  x 4' and  $\frac{3}{4}$  x 10'.

We have the experience, skills, and

the right equipment to get your job done efficiently and with the highest quality materials.

# DAVI MC4P11 TECHNICAL DATA

	SECTION TYPE	
	Flat (hard way)	1
	Flat (easy way)	2
	Square	3
	Round	4
	Angle (leg out)	5
	Angle (leg in)	6
	T (leg out)	7
	T (leg in)	8
	T (leg up/down)	9
	Rectangular HSS (hard way)	10
	Square HSS	11
	Channel (leg out)	12
	Channel (leg in)	13
	Standard beam (leg out)	14
III	Wide Flange Beam (easy way)	15
0	Tube	16
0 0	Ріре	17
	Channel (hard way)	18
	Standard Beam (hard way)	19
	Wide Flange Beam (hard way)	20

# **METAL ROLLING & FORMING CAPABILITIES**

#### FORMING METHODS

- Press Breaking
- Rolling
- Step Breaking
- Straightening
- Heavy Lifting
- High Bay Ceilings
- Cambering

### PROJECTS

- Cyclones
- Tanks
- Cylinders
- Arcs
- Handrails
- Rolled Angle
- Rolled Beams
- Sheet Metal
- Rectangular to Round
- Tapered Chutes and Ducts
- Multiple Bends
- Heavy plate
- Tubs
- Elbows
- Ductwork

#### **PRODUCTION VOLUME**

• Prototype to 10,000 units

#### **FILE FORMATS**

- AutoCAD
- 2D Mechanical
- 3D Inventor

#### **EQUIPMENT LIST**

- Accupress 175-Ton Pressbrake (¼" x 14')
- Trumpf C110 122-Ton Pressbrake (¼" x 10')
- Wysong 175-Ton Pressbrake (¼" x 12')
- Parmigiani VBH10\380 4 Roll (1" x 10')
- Roundo PS-255 Roll (1/2" x 10')
- Roundo 4' Roll (¼" x 4', down To 6" diameter)
- Davi Angle roller







# INDUSTRIAL PAINTING, POWDER COATING AND BLASTING SERVICES



# WHY CHOOSE SWANTON WELDING FOR YOUR INDUSTRIAL PAINTING, POWDER COATING AND BLASTING NEEDS?

As part of Swanton Weld's commitment to offering clients full-service product manufacturing, we have acquired a GFS downdraft paint booth for handling all industrial painting and blasting jobs.

Our deluxe paint booth allows for advanced airflow management and contamination control, and is complete with various lifts and a bake-on cure feature that bakes on the finish for better paint quality. In addition, our paint booth includes multi-filtered air, T-8 color corrected tubes as well as optional cure packages.

Our powder coater has a 30" x 60" opening with 120" length load bar along with a 5-stage pretreatment system, stainless steel construction, stage-1 heated, conveyor line, dry-off and bake oven. Specifications include ITW GEMA, Nordson Prodigy II gun, Easytronic gun and control unit, with flat, profile, and recoat settings.

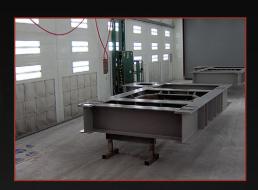
In addition to our paint booths and powder coat line. Swanton Welding has invested in a blast booth which is capable of handling your blasting needs. A 16'  $\times$  14'  $\times$  60' booth with a continuous reclaim system and 120 PSI operating pressure enables us to effectively remove necessary coating with high performance equipment and provide you with the required profile for your project. We can effectively blast carbon steel, stainless and aluminum.

Our main blast media is G80 Grit which is very effective when blasting carbon steel items as it has very high recyclability and low dusting capabilities. When working with stainless or aluminum we turn to a G80 Australian Garnet which is a cleaner abrasive and enables us to prevent any cross contamination with carbon steel. The result with either product is it meets customer requirements and provides a blast profile within correct specifications.

Meeting the needs of a high-production environment, our certified industrial painting, blasting and powder coating services can work with products measuring up to 75' x 32' x 28'. We invite you to contact our company today to learn more about our newest painting technology.







## INDUSTRIAL PAINTING, POWDER COATING AND BLASTING CAPABILITIES

#### COATING

- Painting
- Powder Coating
- Blast Finish
- Coal Tar
- Elastomer
- Enamel
- Ероху
- Galvanizing
- Micro Zinc Phosphate
- Organic
- Slip Resistant
- Thick Film
- Urethane
- Water/Solvent Based
- Zinc
- Zinc Phosphate

### SUBSTRATE

• Mild Steel

## COATING CHARACTERISTICS

- Abrasion Resistant
- Abrasive
- Condensation Resistant
- Galvanized
- High Temperature
- Protective

#### SURFACE PREPARATION

- Sand Blasting
- Coating Removal
- Degreasing

### APPLICATION PROCESS

• Air Dry • Baked

Brush

- Dip RollerSpray
- Textured

## PAINT & POWDER COAT BOOTH SIZES

Paint Booths

- 75' x 32' x 28'
- 50' x 14' x 16'
- 48' x 14' x 14'

#### **Powder Coat Line**

• 2' x 4' x 6' (up to 250lbs)

### BLAST BOOTH

- 60' x 16' x 14'
- Continuous Reclaim System
- 120 PSI Operating Pressure
- Can Blast Carbon Steel, Stainless & Aluminum
- Media: G80 Steel Grit & G80 Australian Garnet

### **PRODUCTION VOLUME**

- Prototypes
- Small Runs
- Medium Runs
- Industrial Applications

